Geotrek Documentation

Release 1.0.0

Makina Corpus

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CHAPTER 1

INSTALLATION

These instructions will install *Geotrek* on a dedicated server for production. For a developer instance, please follow *the dedicated procedure*.

1.1 Requirements

- Ubuntu Server 12.04 Precise Pangolin (http://releases.ubuntu.com/12.04/) or Ubuntu Server 14.04 Trusty Tahr (http://releases.ubuntu.com/14.04/)

A first estimation on system resources is :

- 1 Go RAM
- 10 Go disk space

1.2 Installation

Once the OS is installed (basic installation, with OpenSSH server), install the last version with the following commands :

```
curl https://raw.githubusercontent.com/makinacorpus/Geotrek/master/install.sh > install.sh
chmod +x install.sh
./install.sh
```

You will be prompt for editing the base configuration file (`settings.ini`), using the default editor.

notes If you leave *localhost* for the database host (`dbhost` value), a Postgresql with PostGis will be installed locally.

In order to use a remote server (*recommended*), set the appropriate values for the connection. The connection must be operational (it will be tested during install).

To make sure the application runs well after a reboot, try now : `sudo reboot`. And access the application `http://yourserver/`.

You will be prompted for login, jump to loading data section, to create the admin user and fill the database with your data!

1.3 Software update

All versions are published on the Github forge. Download and extract the new version in a separate folder (**recommended**).

```
wget https://github.com/makinacorpus/Geotrek/archive/vX.Y.Z.zip
unzip vX.Y.Z.zip
cd Geotrek-X.Y.Z/
```

Before upgrading, **READ CAREFULLY** the release notes, either from the `docs/changelog.rst` files or online.

Shutdown previous running version :

```
# Shutdown previous version
sudo stop geotrek
```

Copy your old configuration and uploaded files to your new folder.

```
# Configuration files
cp -aR ../previous-version/etc/ .

# Uploaded files
cp -aR ../previous-version/var/ .

# If you have advanced settings
cp ../previous-version/geotrek/settings/custom.py geotrek/settings/custom.py
```

Deploy the new version :

```
# Re-run install
./install.sh

# Empty cache
sudo service memcached restart
```

Check the version on the login page !

note Shutting down the current instance may not be necessary. But this allows us to keep a generic software update procedure.

If you don't want to interrupt the service, skip the `stop` step, at your own risk.

Check out the *troubleshooting page* for common problems.

1.4 Tips and Tricks

- Use symlinks for uploaded files and cached tiles to avoid duplicating them on disk:

```
mv var/tiles ~/tiles
ln -s ~/tiles `pwd`/var/tiles

mv var/media ~/media
ln -s ~/media `pwd`/var/media
```

- Speed-up upgrades by caching downloads :

```
mkdir ~/downloads
mkdir  ~/.buildout
```

Create `/home/sentiers/.buildout/default.cfg` with

```
[buildout]
download-cache = /home/sentiers/downloads
```

CHAPTER 2

LOADING DATA

2.1 Initial Data

Load basic data :

```
make load_data
```

note This command will load default users, groups, default values for lists... in French and English. So you need to enable EN and FR at least in `etc/settings.ini`

If you do not load data, you'll have to at least create a super user :

```
bin/django createsuperuser --username=admin --email=admin@corp.com
```

or change its password :

```
bin/django changepassword --username admin <password>
```

2.2 Prerequisites for your data

2.2.1 Layers

- WMS (scan + ortho)
- Projection
- Bounding box in native projection

2.2.2 Core

- Only LineString geometries
- Simple geometries
- Not overlapping

If possible :

- Connex graph
- Name column

- Data source

Formats: Shapefile or pure SQL dump SQL (CREATE TABLE + INSERT)

2.2.3 Land

- Cities polygons (Shapefile or SQL, simple and valid Multi-Polygons)
- Districts (Shapefile ou SQL, simple and valid Multi-Polygons)
- Restricted Areas (Shapefile ou SQL, simple and valid Multi-Polygons)

2.2.4 Extras

- Languages list
- Structures list (and default one)

2.3 Load MNT raster

In QGIS, you can visualize your DEM, or merge several tiles together (in *Raster* > *Misc* > *Merge*).

Generate a GeoTIFF, and upload both files (`.tif` + `.tfw`) on the server. And use the Geotrek command to load it into PostGIS :

```
bin/django loaddem <PATH>/dem.tif
```

note This command makes use of *GDAL* and `raster2pgsql` internally. It therefore supports all GDAL raster input formats. You can list these formats with the command `raster2pgsql -G`.

CHAPTER 3

CONFIGURATION

3.1 Configuration update

After editing `etc/settings.ini`, refresh the running instance with :

```
make env_standalone deploy
```

There a few cases where running `install.sh` would be necessary. If you change the `rooturl` or other parameters that affect *nginx* site configuration.

3.2 Spatial extents

In order to check your configuration of spatial extents, a small tool is available at http://server/tools/extents/.

notes Administrator privileges are required.

3.3 Custom spatial reference

Geotrek comes with a few projection systems included (*EPSG:2154*, *EPSG:32600*, *EPSG:32620*, *EPSG:32632*)

In order to use a specific projection system :

- Make sure the SRID is present in the `spatial_ref_sys` table. See PostGIS documentation to add new ones
- Download the JavaScript *proj4js* definition from **'http://spatialreference.org'_** and save it to *Geotrek/static/proj4js/<SRID>.js*

Using the command-line :

```
curl "http://spatialreference.org/ref/epsg/<SRID>/proj4js/" > Geotrek/static/proj4js/<SRID>.js
```

note *Geotrek* won't run if the spatial reference has not a metric unit.

It's possible to store your data using a specific SRID, and use a classic Google Maps projection (3857) in the Web interface (useful for *WMTS* or *OpenStreetMap* layers). See *advanced configuration*...

3.4 Users management

Geotrek relies on Django authentication and permissions system : Users belong to groups and permissions can be assigned at user or group-level.

The whole configuration of user, groups and permissions is available in the *AdminSite*, if you did not enable *External authent* (see below).

By default four groups are created :

- Readers
- Path managers
- Trek managers
- Editor

Once the application is installed, it is possible to modify the default permissions of these existing groups, create new ones etc...

If you want to allow the users to access the *AdminSite*, give them the *staff* status using the dedicated checkbox.

3.5 Database users

It is not safe to use the `geotrek` user in QGis, or to give its password to many collaborators.

A wise approach, is to create a *read-only* user, or with specific permissions.

With *pgAdmin*, you can create database users like this :

```
CREATE ROLE lecteur LOGIN;
ALTER USER lecteur PASSWORD 'passfacile';
GRANT CONNECT ON DATABASE geotrekdb TO lecteur;
```

And give them permissions by schema :

```
GRANT USAGE ON SCHEMA public TO lecteur;
GRANT USAGE ON SCHEMA geotrek TO lecteur;
GRANT SELECT ON ALL TABLES IN SCHEMA public TO lecteur;
GRANT SELECT ON ALL TABLES IN SCHEMA geotrek TO lecteur;
```

You can also create groups, etc. See postgresql documentation.

3.6 Email settings

Geotrek will send emails :

- to administrators when internal errors occur
- to managers when a feedback report is created

Email configuration takes place in `etc/settings.ini`, where you control recipients emails (`mailadmins`, `mailmanagers`) as well as server parameters (`host`, `user`, `password`, ...)

You can test you configuration with the following command. A fake email will be sent to the managers :

```
bin/django test_managers_emails
```

3.7 Advanced Configuration

See *advanced configuration*...

CHAPTER 4

ADVANCED CONFIGURATION

4.1 Custom setting file

Geotrek configuration is currently restricted to values present in `etc/settings.ini`.

However, it is still possible to write a custom Django setting file.

- Create your a file in *geotrek/settings/custom.py* with the following content :

```
from .prod import *

# My custom value
HIDDEN_OPTION = 3.14
```

- Add this `etc/settings.ini` to specify the newly created setting :

```
[django]
settings = settings.custom
```

- As for any change in settings, re-run `make env_standalone deploy`.

4.2 Disable modules and components

In order to disable a full set of features, in the custom settings file, add the following code:

```
# Disable infrastructure and maintenance
_INSTALLED_APPS = list(INSTALLED_APPS)
_INSTALLED_APPS.remove('geotrek.infrastructure')
_INSTALLED_APPS.remove('geotrek.maintenance')
INSTALLED_APPS = _INSTALLED_APPS
```

In order to remove notion of trails:

```
TRAIL_MODEL_ENABLED = False
```

In order to remove zoning combo-boxes on list map:

```
LAND_BBOX_CITIES_ENABLED = True
LAND_BBOX_DISTRICTS_ENABLED = True
LAND_BBOX_AREAS_ENABLED = False
```

notes By doing so, some software upgrades may not be as smooth as usual. Never forget to mention this customization if you ask for community support.

4.3 WYSIWYG editor configuration

Text form fields are enhanced using TinyMCE.

Its configuration can be customized using advanced settings (see above paragraph).

For example, in order to control which buttons are to be shown, and which tags are to be kept when cleaning-up, add this bloc :

```
TINYMCE_DEFAULT_CONFIG = {
    'theme_advanced_buttons1': 'bold,italic,forecolor,separator,code',
    'valid_elements': "img,p,a,em/i,strong/b",
}
```

This will apply to all text fields.

For more information on configuration entries available, please refer to the official documentation of *TinyMCE version 3*.

4.4 View attachments in the browser

Attached files are downloaded by default by browser, with the following line, files will be opened in the browser :

```
MAPENTITY_CONFIG['SERVE_MEDIA_AS_ATTACHMENT'] = False
```

4.5 Using Google Maps projection in the Web interface

Your data will still be stored using the SRID you specified in the `settings.ini` file, but the maps in the Web interface will be using the Google Mercator projection (EPSG:3857).

It allows you to use *IGN Geoportail* WMTS or *OpenStreetMap* tiles for example

Start by adding this line in your custom Django setting file :

```
LEAFLET_CONFIG['SRID'] = 3857
```

And specify the tiles URLs this way :

```
LEAFLET_CONFIG['TILES'] = [
    ('Scan', 'http://{s}.tile.osm.org/{z}/{x}/{y}.png', '(c) OpenStreetMap Contributors'),
    ('Ortho', 'http://{s}.tiles.mapbox.com/v3/openstreetmap.map-4wvf9l0l/{z}/{x}/{y}.jpg', '(c) MapBo
]
```

4.6 External authent

You can authenticate user against a remote database table or view.

To enable this feature, fill *authent_dbname* and other fields in `etc/settings.ini`.

Expected columns in table/view are :

- username : string (*unique*)
- first_name : string

- last_name : string
- password : string (simple md5 encoded, or full hashed and salted password)
- email : string
- level : integer (1: readonly, 2: redactor, 3: path manager, 4: trekking manager, 6: administrator)
- structure : string
- lang : string (language code)

notes User management will be disabled from Administration backoffice.

In order to disable remote login, just remove *authent_dbname* value in settings file, and update instance (see paragraph above).

Geotrek can support many types of users authentication (LDAP, oauth, ...), contact-us for more details.

4.7 Map layers colors and style

All layers colors can be customized from the settings. See Leaflet reference for vectorial layer style.

- To apply these style changes, re-run `bin/supervisorctl restart all`.

```
MAP_STYLES['path'] = {'color': 'red', 'weight': 5}
```

Or change just one parameter (the opacity for example) :

```
MAP_STYLES['city']['opacity'] = 0.8
```

Regarding colors that depend from database content, such as land layers (physical types, work management...) or restricted areas. We use a specific setting that receives a list of colors :

```
COLORS_POOL['restrictedarea'] = ['#ff00ff', 'red', '#ddddd'...]
```

See the default values in `geotrek/settings/base.py` for the complete list of available styles.

Restart the application for changes to take effect.

4.8 External raster layers

It is possible to add overlay tiles layer on maps. For example, it can be useful to:

- Get the cadastral parcels on top of satellite images
- Home made layers (*with Tilemill or QGisMapserver for example*). Like the park center borders, traffic maps, IGN BDTopo® or even the Geotrek paths that are marked as invisible in the database!

In `custom.py`, just add the following lines:

```
LEAFLET_CONFIG['OVERLAYS'] = [
    ('Coeur de parc', 'http://serveur/coeur-parc/{z}/{x}/{y}.png', '&copy; PNF'),
]
```

4.9 External vectorial layers

In order to display vectorial layers in *Geotrek* and *Geotrek-rando*, it is possible to define external datasources.

So far, the following formats are supported :

- GeoJSON
- TIF (*TourInFrance*)
- SITRA (*SIT Rhone-Alpes*)

From the Administration backoffice, create datasources using a name, an URL, and a pictogram. You can choose if this layer should be displayed in the different Geotrek modules, or published to the public Website (*Geotrek-rando*).

notes For SITRA to work with multilang, make sure that the different locales are in the query (`query={"apiKey":"...","locales":["fr","en"]...`)

4.9.1 Expected properties

For `GeoJSON` files, you can provide the following properties :

- `title`: string
- `description`: string
- `website`: string
- `phone`: string
- `pictures`: list of objects with `url` and `copyright` attributes
- `category`: object with `id` and `label` attributes

4.10 Disable darker map backgrounds

Since IGN map backgrounds are very dense and colourful, a dark opacity is applied. In order to disable, change this MapEntity setting :

```
MAPENTITY_CONFIG['MAP_BACKGROUND_FOGGED'] = False
```

4.11 Override public document OpenOffice template

Copy the file `geotrek/trekking/templates/trekking/trek_public.odt` to `var/media/templates/trekking/trek_public.odt`.

Edit the copy using *OpenOffice*.

Note: The default template may change in the future versions. You will be in charge of porting the modification to your copy.

4.12 Custom font in public document OpenOffice template

In order to use custom fonts in trek PDF, it is necessary to install the font files on the server.

Microsoft fonts like *Arial* and *Verdana* can be installed via the package manager

```
sudo apt-get install ttf-mscorefonts-installer
```

For specific fonts, copy the `.ttf` (or `.otf`) files into the folder `/usr/local/share/fonts/custom/` as root, and run the following command

```
fc-cache
```

For more information, check out Ubuntu documentation.

4.13 Custom colors in public document OpenOffice template

Trek export geometries are translucid red by default. In order to control the apparence of objects in public trek exports, use the following setting :

```
MAP_STYLES['print']['path'] = {'weight': 3}
```

See *Leaflet* reference documentation for detail about layers apparence.

4.14 Custom logos

You might also need to deploy logo images in the following places :

- `var/media/upload/favicon.png`
- `var/media/upload/logo-login.png`
- `var/media/upload/logo-header.png`

4.15 Share services between several Geotrek instances

As explained *in the design section*, *Geotrek* relies on several services. They are generic and reusable, and can thus be shared between several instances, in order to save system resources for example.

A simple way to achieve this is to install one instance with everything as usual (*standalone*), and plug the other instances on its underlying services.

4.15.1 Database

Sharing your postgreSQL server is highly recommended. Create several databases for each of your instances.

Then in `etc/settings.ini`, adjust the `host` and `dbname` sections of each instance.

4.15.2 Capture and conversion

On the standalone server, make sure the services will be available to others. Add the following lines in its `settings.ini` :

```
[convertit]
host = 0.0.0.0

[screamshotter]
host = 0.0.0.0
```

In `custom.py`, point the tiles URL to the shared services (replace `SERVER` by the one you installed as standalone) :

```
MAPENTITY_CONFIG['CONVERSION_SERVER'] = 'http://SERVER:6543'
MAPENTITY_CONFIG['CAPTURE_SERVER'] = 'http://SERVER:8001'
```

4.15.3 Tilecache

Only if you use a WMS server, you will have to share the Tilecache tile server.

In `custom.py`, point the tiles URL towards the shared :

```
LEAFLET_CONFIG['TILES'] = [
    ('Scan', 'http://SERVER/tiles/scan/{z}/{x}/{y}.png', '&copy; Attributions'),
    ('Ortho', 'http://SERVER/tiles/ortho/{z}/{x}/{y}.png', '&copy; Attributions'),
]
```

notes This is a short tip, it will only work if the spatial extent and projection srid is the same on all instances.

Otherwise configure Tilecache manually, or simply use external tile services such as *IGN Geoportail WMTS*.

4.15.4 Shutdown useless services

Now that your instances point the shared server. You can shutdown the useless services on each instance.

Start by stopping everything :

```
sudo stop geotrek
```

Before you used to run `make env_standalone deploy` on every server. Now you will have only one *standalone*, and on the other ones the *Geotrek* application only.

To achieve this, you will just have to run the *prod* environment instead of *standalone* in the deployment procedure (*or when settings are changed*) :

```
make env_prod deploy
```

4.16 Control number of workers and request timeouts

By default, the application runs on 4 processes, and timeouts after 30 seconds.

To control those values, add a section in `etc/settings.ini` for each running service. See `conf/settings-defaults.cfg` for an exhaustive list:

```
[gunicorn-app-conf]
workers = 4
timeout = 30
```

To know how many workers you should set, please refer to gunicorn documentation.

CHAPTER 5

MAINTENANCE

5.1 Operating system updates

```
sudo apt-get update
sudo apt-get dist-upgrade
```

5.2 Application backup

Give postgresql the right to write files in application folder :

```
sudo adduser postgres `whoami`
```

Database

```
sudo su postgres
pg_dump -Fc geotrekdb > /home/sentiers/`date +%Y%m%d%H%M`-database.backup
exit
```

Media files

```
cd Geotrek-vX.Y.Z/
tar -zcvf /home/sentiers/`date +%Y%m%d%H%M`-media.tar.gz var/media/
```

Configuration

```
# Folder Geotrek-vX.Y.Z/
tar -zcvf /home/sentiers/`date +%Y%m%d%H%M`-conf.tar.gz etc/ geotrek/settings/custom.py
```

5.3 Application restore

Create empty database :

```
sudo su postgres

psql -c "CREATE DATABASE ${dbname} ENCODING 'UTF8' TEMPLATE template0;"
psql -d geotrekdb -c "CREATE EXTENSION postgis;"
```

Restore backup :

```
pg_restore -d geotrekdb 20140610-geotrekdb.backup
exit
```

Extract media and configuration files :

```
cd Geotrek-vX.Y.Z/
tar -zxvf 20140610-media.tar.gz
tar -zxvf 20140610-conf.tar.gz
```

Re-run `./install.sh`.

5.4 PostgreSQL optimization

- Increase `shared_buffers` and `work_mem` according to your RAM
- Log long queries
- Use pg activity for monitoring

5.5 Access your database securely on your local machine (QGis)

Instead of opening your database to the world (by opening the port 5432 for example), you can use SSH tunnels.

CHAPTER 6

TROUBLESHOOTING

6.1 Installation outputs a lot of database FATAL ERROR

Data schema migrations code do not inspect the database before executing commands. When appropriate, errors are skipped in python code, but PostgreSQL error output still remains.

http://south.aeracode.org/ticket/1247

6.2 Installation script hangs on syncdb –migrate

This command is in charge of changing the database schema [1].

Make sure you close every *pgADMIN* session on the database while upgrading.

[1] http://south.aeracode.org/ticket/209

6.3 No paths in list, where table contains records

Check that the projection of your data is correct.

Check that the extent of the map covers your data, using the extents tool at *http://server/tools/extents/*.

6.4 No background tiles

Check the values of your WMS settings (server name should end with `?`, layers names should exist on server).

Check the values in the generated TileCache configuration in `etc/tilecache.cfg`.

6.5 Error at loading DEM

Check that your extent (`spatial_extent`) is completely contained in your DEM.

6.6 502 Bad Gateway

If the application does not show up (`502 Bad Gateway`), make sure the Geotrek services run with the following commands :

```
bin/supervisorctl status
```

You may want to force their restart :

```
bin/supervisorctl restart all
```

If they don't stay alive, check the log files in the `var/log/` folder. It might come from a configuration problem.

CHAPTER 7

FREQUENTLY ASKED QUESTIONS

7.1 How 3D informations are obtained ?

All paths geometries are *"draped"* on a Digital Elevation Model, when created or updated.

All linear objects that defined using topologies (*treks, ...*) take their 3D informations from their related paths, instead of reading the DEM.

7.2 How the ascent is computed on treks ?

We compute the cumulative elevation gain.

We sample the DEM every 25m by defaut (see `ALTIMETRIC_PROFILE_PRECISION` setting), and we add some smoothing to avoid noise.

For more details :

- The smoothing explanation
- The piece of code to compute positive and negative accumulations
- Draping lines with PostGIS (or french version)

7.3 How POIs are related to treks ?

POIs are considered as an *editorial* information, and are created carefully along treks.

When a POI is created, it is attached to the closest path.

A trek is defined by a serie of paths, and some POIs are associated to them.

notes There is currently no way to manually control the association between treks and POIs.

This was discussed among the first *Geotrek* users, come and argue on the mailing list !

If `TREKKING_TOPOLOGY_ENABLED` is set to `False`, there are no paths involved. POIs are thus related to treks using a basic spatial intersection, with a distance set in setting `TREK_POI_INTERSECTION_MARGIN` (default to 500 meters).

7.4 Can I have overlapping districts ?

Districts are a generic notion to qualify your territory. They can be valleys, mounts, ...

You can imagine using the districts table for all those different notions, resulting in overlapping geometries. Geotrek will associate them all to your objects.

7.5 Why Makina Corpus sells Geotrek, released under an Open-Source license ?

In the early years of the Free Software movement, it was quite common to pay in order to receive a physical copy (on floppy disks) of some GNU programs and source code.

In the late nineties, the IT industry was not confortable with the confusion introduced by the word *Free* in English ("free" as freedom, or "free" as costless), and therefore started to spread the word *Open Source* instead.

Today, those copies of Open Source software can be obtained on the Internet for free of course. But yet, the GNU Software Fundation still recommends to claim a financial contribution when distributing them, in order to support the development and maintenance. And note that nowadays, many of the most important Open Source applications have their own fundation, focused on collecting funds for development and maintenance.

The *Geotrek fundation* does not exist yet, but the community is growing. Makina Corpus is currently maintaining this Open Source application, which implies the following responsabilities :

- Maintain a public website, with a fully working demo ;
- Write documentation ;
- Provide community support on the mailing-list ;
- Promote the application at conferences, social networks and communities ;
- Triage and investigate issues tickets on Github ;
- Fix bugs and regressions if any ;
- Contribute, propose and argue code merge on external libraries ;
- Keep software dependencies up-to-date, without regressions ;
- Make sure the application remains easy to install on latest Linux distributions ;
- Add some engineering to allow customization and pluggability when new specific features are planned ;

Each of these tasks are often considered implicit, but they consume energy and time, which represents a substantial cost for a company like ours.

To conclude, we don't really sell *Geotrek*, since you can get it on Github and install it easily, but we ask for a financial contribution regarding the above responsabilities. It is not only legal, but also recommended by the funders of the Free and Open Source Software movement.

7.6 How can I help and contribute ?

There are many ways to contribute to a Free Software. And modifying the source code is probably the least common action. For example :

- Help the users and answers questions on the mailing-list ;

- Download it, try it ;
- Open a ticket when you encounter a bug ;
- Open a ticket when you have a suggestion or feature idea ;
- Share your feedback, spread the word inside your organization ;
- Write and talk about *Geotrek*, at conferences, workgroups, forums ;
- Translate the documentation ;
- Translate the menus, buttons and labels (we use Transifex) ;
- Maintain the installation script for different Linux distributions (*requires some basic Linux skills*) ;
- Fix bugs or improve layout and apparence (*requires Webmaster skills*) ;
- Fix bugs or improve core modules (*requires python/Django skills*).

Join us on the mailing-list! Send an email to `geotrek-fr+subscribe@googlegroups.com` and you will receive an invitation automatically :)

CHAPTER 8

USER MANUAL

8.1 Screencasts

(**In French**)

- Présentation de l'interface
- Création d'un itinéraire
- Création d'un POI
- Ajout de photos
- Administration

8.2 Modules

Geotrek est composé de différents modules.

Gestion des sentiers :

- Tronçons (linéaire entre 2 intersections)
- Sentiers (groupe de tronçons)
- Statuts (physique, foncier, organismes ayant la compétence sentiers, gestionnaires des travaux et de la signalétique)
- Aménagements (ouvrages et équipements)
- Signalétique
- Interventions (travaux)
- Chantiers (groupe d'interventions)

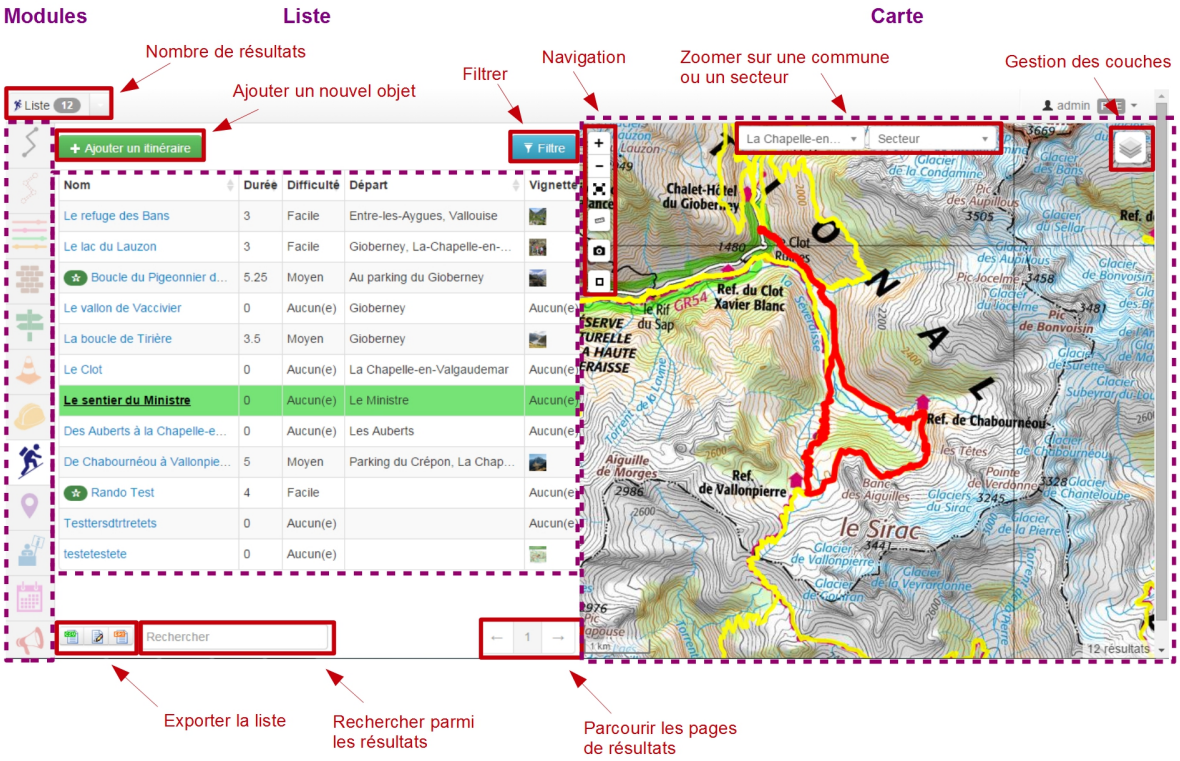
Valorisation de l'offre touristique :

- Itinéraires (randonnées)
- POI (points d'intérêt patrimoniaux)
- Objets touristiques (activités de pleine nature, musées, produits labellisés...)
- Evènements (animations, expositions, sorties...)
- Signalements (problèmes signalés par les internautes sur un itinéraire depuis Geotrek-rando)

Chaque module est accessible depuis le bandeau vertical.

Tous les modules sont construits de la même façon :

- une liste paginée des objets du module
- la possibilité de filtrer la liste ou de faire une recherche libre
- la possibilité d'exporter les résultats en CSV (pour EXCEL ou CALC), en SHAPEFILE (pour QGIS ou ArcGIS) et en GPX (pour l'importer dans un GPS)
- une carte dans laquelle il est possible de naviguer (déplacer, zoomer), d'afficher en plein écran, de mesurer une longueur, d'exporter une image de la carte, de réinitialiser l'étendue, de zommer sur une commune ou un secteur et de choisir les couches à afficher



Au survol d'un objet dans la liste, celui-ci est mis en surbrillance sur la carte.

Au survol d'un objet sur la carte, celui-ci est mis en évidence dans la liste.

La liste des résultats est filtrée en fonction de l'étendue de la carte affichée.

C'est aussi depuis un module qu'il est possible d'ajouter de nouveaux objets.

Un clic sur un objet dans la liste ou la carte permet d'accéder à la fiche détaillée de celui-ci.

8.3 Fiches détails

8.4 Edition d'un objet

CHAPTER 9

DESIGN

9.1 Architecture

- **Geotrek**, the web application
- **TileCache**, tile and cache remote WMS servers
- **Convertit**, a Web API to convert document and image formats (*.odt to .doc*, *.svg to .png*)
- **Screamshotter**, a Web API to perform Web pages screenshots (*map image exports*).

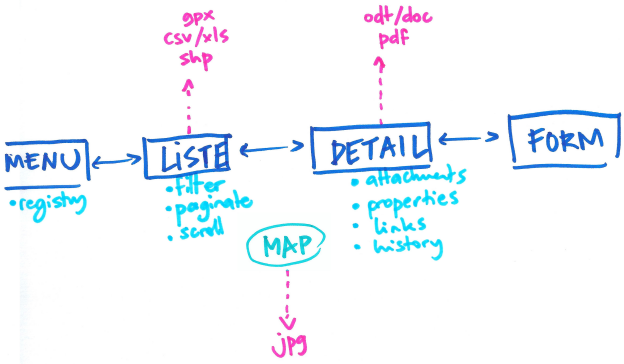
9.2 Main components

The whole project is built on top of *mapentity*.

A generic application in charge of:

- Menus and models registry
- List/Detail/Create/Update/Delete views
- Filtering
- Map images exports
- File attachment
- Document export
- Shapefile/GPX/CSV serializers

For a Django model, we use the registry to activate all views and menus :



Business specific notions are implemented in Geotrek respective applications:

- **common**: shared concepts between all applications (*Organism*, *utils*, ...)
- **authent**: groups, user, profile and structure notions. Optional external authent backend.
- **core**: elevation, paths, snapping, spatial referencing (topologies)
- **land**: static cities/districts/restricted areas layers, physical types, competence, signage and work management
- **infrastructure**: buildings, signages, equipements
- **maintenance**: interventions (on paths or on infrastructures) and projects
- **trekking**: POIs and treks

9.3 Django conventions twists

We have a couple of Django conventions infringements:

- Buildout: (see *DEPLOYMENT* section)
- SQL triggers everywhere: since Geotrek database is to become the central storage component of all park organisation data, it has to behave consistently whether data is modified through the Web application or raw access tools (pgadmin, QGIS). (For example, insertion & update timestamps, geometry computation or DEM wrapping.)
- Safe delete: update field `deleted = True` instead of performing actual delete in table. Requires every querysets to be filtered on deleted. (**TODO**: use dango-safedelete, issue 813)

9.4 Main roles of PostgreSQL triggers

Automatic computation of fields :

- Date insert/update
- Geometry computation of linear referencing (topologies)
- DEM elevation wrapping (3D length, slope, etc.)

Topological path network :

- Split paths at intersection
- Snap paths extremities

9.5 Why buildout ?

- Multiple sub-projects under development (*mr.developer*)
- GDAL installation (*include-dirs*)
- Unique and simple file for user settings input (*etc/settings.ini*)
- Simple provisionning (*configuration templating*)
- Python dependencies versions consistency
- Multiple sets of dependencies (*dev, tests, prod*)

9.6 install.sh script

- No need for multiple OS support
- Can be run just from the project archive
- Install system dependencies
- Single tenant on dedicated server
- Idem-potent, used for both installation and upgrade

9.7 etc/settings.ini

- Centralize configuration values (for both Django and system configuration files)
- Easy syntax
- Default and overridable values (*conf/settings-default.ini*)

Regarding Django settings organisation:

- All application settings have a default (working) value in *settings/base.py*.
- The mechanizm that uses *etc/settings.ini* takes place in *settings/default.py* **only**. This means that other settings management can be derived from *base.py*.
- Production settings (*settings/prod.py*) contains tweaks that are relevant in production only.

CHAPTER 10

DEVELOPMENT

This documentation is dedicated to code contributors, in order to run a development instance.

Developers are advice to run their *Geotrek* instance in an isolated environment, however it is not an absolute prerequisite. More details below.

10.1 Isolated environment

If you use virtual machines or containers (*Vagrant*, *LXC*, ...), this will install all the necessary components for development :

```
./install.sh --dev
```

10.2 Directly on your host

The most minimal components required to run an instance are :

- PostGIS 2 server
- GDAL, GEOS, libproj
- gettext
- libfreetype
- libxml2, libxslt
- Usual Python dev stuff

See the list of minimal packages on Debian/Ubuntu.

If you already have all these components installed your OS (probably because you're already a python/GIS developer), then just jump to the next section !

10.3 Run

Start local instance :

```
make env_dev update serve
```

Note: Running `env_dev` and `update` is recommended after a pull of new source code, but is not mandatory : `make serve` is enough most of the time.

Run unit tests :

```
make env_test update tests
```

Run unit tests in verbose mode, and without migrations :

```
make env_dev update tests
```

For Capture server, run an instance of screamshotter in a separate terminal :

```
bin/django runserver --settings=screamshotter.settings 8001
```

For PDF conversion server, run an instance of Convertit in a separate terminal on `http://localhost:6543`

```
bin/convertit lib/src/convertit/development.ini
```

10.4 Development data

```
make load_data

bin/django loaddata development-pne
```

In order to get elevation data, a DEM is necessary. If you use the default extent, as defined in `conf/settings.ini.sample`, you can load the following dataset :

```
wget http://depot.makina-corpus.org/public/geotrek/mnt_0_ecrins.zip
unzip mnt_0_ecrins.zip
bin/django loaddem mnt_0_ecrins/w001001.adf
```

10.5 Conventions

- Use flake8
- KISS & DRY as much as possible
- Elegant and generic is good, simple is better
- Commits messages are explicit and mention issue number (`(ref #12)` or `(fixes #23)`)
- Features are developed in a branch and merged from Github pull-requests.

10.6 Definition of done

- `docs/changelog.rst` is up-to-date
- A unit-test covers the bugfix or the new feature
- A frontend test (:path:jstests/nav-*.js) covers the navigation bug fix or feature
- A JS *Mocha* test (:path:jstests/tests.*.js) covers the JavaScript bug fix or feature

- Unit-tests coverage is above or at least equal with previous commits
- Settings have default value in `settings/base.py` or `conf/settings-default.ini`
- Installation instructions are up-to-date

Check TODO in the source tree

```
find geotrek | xargs egrep -n -i '(TODO|XXX|temporary|FIXME)'
```

10.7 Release

- Update *VERSION* file, *docs/conf.py*
- Pin (fixed revision) of eggs under development in *buildout.cfg*
- Use semantic versioning
- Use zest.releaser
- Add git tag vX.Y.Z
- Add release on Github (copy-paste `CHANGES` paragraph)

10.8 Model modification

bin/django schemamigration <appName> –auto bin/django syncdb –migrate

notes Add migration file to source control.

10.9 Database reset

Data only:

```
bin/django flush
```

Everything:

```
dbname=geotrekdb
sudo -n -u postgres -s -- psql -c "DROP DATABASE ${dbname};" && sudo -n -u postgres -s -- psql -c "CR
```

10.10 Mapentity development

To develop mapentity and Geotrek together, add the following lines to `etc/settings.ini`:

```
[sources]
mapentity = git https://github.com/makinacorpus/django-mapentity.git branch=develop

[buildout]
auto-checkout += mapentity
```

Then run:

```
make env_dev update
cd lib/src/mapentity/
git submodule init
git submodule update
```

CHAPTER 11

AUTHORS

11.1 Makina Corpus

- Gilles Bassière
- Sylvain Beorchia
- Mathieu Leplatre
- Anaïs Peyrucq
- Satya Azemar
- Simon Thépot
- Chloé Morisset
- Frédéric Bonifas
- Célian Garcia
- Gaël Utard

11.2 Credits

- *Information desk* by Alex Berkowitz from The Noun Project
- *Calendar* by Laurent Patain from The Noun Project
- *Restaurant* designed by Roberto Pinto from the Noun Project
- *Kayak* designed by johanna from the Noun Project
- *Luggage* designed by Luis Prado from the Noun Project
- *Location* designed by Jacob Lowe from the Noun Project
- *Food* designed by Rémy Médard from the Noun Project
- *Climbing* designed by Eric Milet from the Noun Project
- *Box Office* designed by Alessio Damiano from the Noun Project

CHAPTER 12

CHANGELOG

12.1 1.0.0 (2015-08-03)

This version is numbered 1.0.0 so the major number reflects the API compatibility with Geotrek-Rando.

Bug fixes

- Order intersections in Geotrek light mode
- Fix projection of waypoints in GPX exports

12.2 0.35.1 (2015-07-17)

Bug fixes

- Fix installation on ubuntu 12.04 with recent updates

12.3 0.35.0 (2015-07-10)

New features

- Add an import framework

Bug fixes

- Fix a crash in appy pod (PDF generation)
- Fix login with restricted access to some contents
- Fix buildout bootstrap arguments

12.4 0.34.0 (2015-05-20)

New features

- Itinerancy (parent/children treks)
- Allow to choose ordering of categories for Geotrek-Rando
- Bootstrap grid editor for flatpages

- Approved touristic contents and events
- Option to split trek category by practice or accessibility

Bug fixes

- Fix duration notation
- Flatten altimetry profiles

12.5 0.33.4 (2015-04-07)

Bug fixes

- Ensure trek duration is a positive number
- Fix cirkwi exports (second try)
- Fix public PDF templates

12.6 0.33.3 (2015-04-01)

Bug fixes

- Fix systematic crash in PDF conversions

12.7 0.33.2 (2015-04-01)

Bug fixes

- Remove italian from fixtures
- Fix crash when generating two PDF in parallel

12.8 0.33.1 (2015-03-25)

Bug fixes

- Fix flat pages crash
- N to N source field (rel #1354)

12.9 0.33.0 (2015-03-25)

Breaking changes

- A new permission "Can publish ..." is required to publish treks, pois, touristic contents and touristic events. Grant it to your users and groups if need be
- DB table `l_b_source` is renamed as `l_b_source_troncon`

New features

- Publication workflow (fixes #1018)

- Allow to add links to Youtube or Soundcloud media as attachment
- Make pictograms optional in some places when not required by Geotrek-Rando
- Add source for treks, touristic contents and touristic events (fixes #1354)
- Add external id field for treks, pois, touristic contents and touristic events
- Group cirkwi matchings in admin site (fixes #1402)

Bug fixes

- Fix projection of OSM link in feedback email
- Fix language in cirkwi exports

12.10 0.32.2 (2015-03-06)

Bug fixes

- Home now redirects to treks list in light version (without topologies)
- Fix Cirkwi export in light version
- Fix SRID in database migrations
- Add signage type filter again (fixes #1352)
- Add missing date filters to touristic events list

12.11 0.32.1 (2015-03-04)

Bug fixes

- Fix creation of a loop topology with two paths (fixes #1026)

12.12 0.32.0 (2015-03-04)

New features

- Export to cirkwi/espace loisirs IGN. After upgrade, run `bin/django loaddata cirkwi` to load data cirkwi tags and categories
- Wysiwyg editor for static web pages

Bug fixes

- Hide not published static pages in public REST API

12.13 0.31.0 (2015-03-02)

New features

- Add support of Ubuntu 14.04 to installer
- Public PDF for touristic contents/events (fixes #1206)

- Add treks close to other treks in REST API
- Add pictograms for trek accessibilities, touristic content types and touristic event types

Bug fixes

- Show edit button when having bypass structure permission
- Export missing fields in list exports (fixes #1167)
- Fix formating of float and boolean values in list exports (fixes #1366, #1380)
- Fix french translation
- Allow anonymous access to altimetry API for public objects
- Hide not published and deleted items in public REST API

12.14 0.30.0 (2015-02-19)

Breaking changes

- Trek practice (formerly usage) is no single valued so if a trek has multiple usages only one will be kept after upgrade. Others will be **lost**!
- After upgrade, run `make load_data` to load fixtures for accessibilities or create them by hand. You should clean-up the list of practices by hand.
- Don't forget to set up permissions to administrate practices and accessibilities.

New features

- Split trek usage field into practice and accessibility
- Treks and POIs are now structure related
- Allow anonymous access to media related to published items
- Check model read permission to give access to media
- Add a settings to set up CORS (cross-origin resource sharing)
- Allow to get POIs for a specific trek in REST API
- Consistent REST API (type1, type2, category for treks, touristic contents and touristic events)

Bug fixes

- Ensure path snapping is done on the closest point and is idempotent
- Fix language of PNG elevation charts
- Fix logo on login page
- Fix logs rotation
- Fix permissions creation

12.15 0.29.0 (2015-02-04)

New features

- GeoJSON API with all properties for Trek and Tourism

Bug fixes

- Fix permissions required to sync static Web pages
- Fix geom computation on line topologies with offset

12.16 0.28.8 (2014-12-22)

Bug fixes

- Fix altimetry sampling for segment with 0 length (rel #1337)

12.17 0.28.7 (2014-12-22)

Bug fixes

- Fix altimetry trigger when TREKKING_TOPOLOGY_ENABLED is set to False

12.18 0.28.6 (2014-12-18)

Bug fixes

- Fix 3D length shorter than 2D length (run sql command `UPDATE l_t_troncon SET geom=geom;` after upgrade to update altimetry informations of existing geometries)
- Fix translation of "Information desks" in public trek PDF
- Fix prepare_map_images and prepare_elevation_charts commands failing for deleted objects and for objects without geom

12.19 0.28.5 (2014-12-09)

Bug fixes

- Fix DEM optimizations when minimum elevation is zero (fixes #1291)
- Fix regression for translations of tourism (fixes #1315)
- Fix duplicate entries with year filter (fixes #1324)

Documentation

- French user manual first step about general interface

New features

- Set PostgreSQL search_path at user level (fixes #1311)
- Show 3D and 2D length in detail pages (fixes #1101)
- Show length and elevation infos in trail and all statuts detail pages (fixes #1222)
- Show trail length in list and exports (fixes #1282)
- Replace stake by length in path list (fixes #956, fixes #1281)
- Add subcontracting in intervention filter (fixes #1144)

- Add missing fields in project filter (fixes #219, fixes #910)
- Show status in interventions table among detail pages (fixes #1193)
- Add missing field in projects exports (ref #1167)
- Add length column to land module lists
- Number of workers and request timeout can be now configured in `settings.ini`
- Various improvements on trek public template, by Camille Monchicourt

12.20 0.28.4 (2014-11-21)

Bug fixes

- Fix mouse position indicator on `/tools/extents/` page when map tiles have Google projection
- Fix missing filters in trails list (fixes #1297)
- Fix infrastructure main type filter (fixes #1096)
- Fix flatpage creation without external url in adminsite
- Fix path detail page where deleted objects were shown (fixes #1302)
- Fix position of POIs on trek detail maps (fixes #1209)
- Fix TinyMCE not preserving colors (fixes #1170)
- Raise validation error instead of crashing when submitted topology is empty (fixes #1272)

Documentation

- Fix mention of MAP_STYLES (ref #1226)

Changes in experimental features

- Renamed *usage* to *type* in touristic events (fixes #1289)

12.21 0.28.3 (2014-11-12)

Bug fixes

- Fix upload form author/legend format (fixes #1293)
- Fixes history list (ref #1276)
- Prevent email to be sent twice on conversion error. Use info instead.
- Fix paperclip translations missing (fixes #1294)
- Fix filetypes not being filtered by structure (fixes #1292)
- Fix apparence of multiple-choices in forms (fixes #1295)

12.22 0.28.2 (2014-11-05)

Bug fixes

- Fix upgrade of django-leaflet to 0.15.0 (overlay layers)

- Fix apparence of overlay layers for tourism when experimental features are disabled
- Fix plural in tourism translation
- Fix unit tests
- Run this command to set the default information desk type with the original pictogram (or select a pictogram from the adminsite)

```
cd Geotrek-0.28.2/

curl "https://raw.githubusercontent.com/makinacorpus/Geotrek/v0.27.2/geotrek/trekking/static/trekking
```

12.23 0.28.1 (2014-11-05)

Bug fixes

- Fix deployment when tourism is not enabled
- Fix default duration when invalid value is filled (fixes #1279)
- Fix year filters for intervention, infrastructure and project (fixes #1287)
- Fix list filters not being restored (fixes #1236)

12.24 0.28.0 (2014-11-04)

Breaking changes

- Before running install, run this SQL command to add a column for file attachments :

```
ALTER TABLE fl_t_fichier ADD COLUMN marque boolean DEFAULT false;
```

New features

- Information desks now have a type (*Maison du parc*, *Tourist office*, ...) with the ability to set dedicated pictograms (fixes #1192).
- Ability to control which picture will be used in trek, using clicks on stars in attachments list (fixes #1117)
- Ability to edit attachments from detail pages directly (fixes #177, the 5th oldest issue!)
- Add missing columns in intervention exports (fixes #1167)
- Add ability (for super-admin) to add/change/delete zoning objects in Adminsite (ref #1246)
- Add ability to have paths records in database that will not appear in Geotrek lists and maps. Just set column `visible` to false in `l_t_troncon` table.
- Add ability to add external overlay tile layers (fixes #1203)

Bug fixes

- Fix position of attachment upload form on small screens
- Clearer action message in object history table
- Prevent image ratio warning from disappearing (fixes #1225)
- Touristic contents
- Touristic events

Internal changes

- Upgraded Chosen library for dropdown form fields
- Set `valide` column default value to false on paths table `l_t_troncon` (fixes #1217)
- All information desks are now available in GeoJSON (*will be useful to show them all at once on Geotrek-rando*).
- All tables and functions are now stored in different schemas. It allows to distinguish Geotrek objects from *postgreSQL* and *PostGIS*, and to grant user privileges by schema. It is also easier to browse objects in *pgAdmin* and *QGis*.

  Caution: if you created additional database users, you may have to change their `search_path` and/or their `USAGE` privilege.

Experimental features

- We introduced models for touristic contents and events. In order to load example values for categories and types, run the following commands:

```
bin/django loaddata geotrek/tourism/fixtures/basic.json
cp geotrek/tourism/fixtures/upload/* var/media/upload/
```

- We introduced models for static pages, allowing edition of public static Web pages from Geotrek adminsite.

In order to enable those features under construction, add `experimental = True` in `etc/settings.ini`. Note that none of them are used in *Geotrek-rando* yet.

notes Give related permissions to the managers group in order to allow edition (`add_flatpage`, `change_flatpage`, `delete_flatpage`, `add_touristiccontent` ...).

12.25 0.27.2 (2010-10-14)

Bug fixes

- Fix elevation info not being computed when intervention is created (ref #1221)
- Fix list of values for infrastructure and signage types (fixes #1223)
- Signages can now be lines if setting SIGNAGE_LINE_ENABLED is True (fixes #1141)
- Fix HTML tags in PDF exports (fixes #1235)
- Fix regression with Geotrek light

12.26 0.27.1 (2010-10-13)

Bug fixes

- Fix problems in forms, prevent Javascript errors

12.27 0.27.0 (2010-10-09)

Breaking changes

- Attribute for single information desk was removed (was used in **Geotrek-rando** < 1.29)

- Renamed setting `TREK_PUBLISHED_BY_LANG` to `PUBLISHED_BY_LANG`
- Renamed setting `TREK_EXPORT_MAP_IMAGE_SIZE` to `EXPORT_MAP_IMAGE_SIZE`, `TREK_EXPORT_HEADER_IMAGE_SIZE` to `EXPORT_HEADER_IMAGE_SIZE` and `TREK_COMPLETENESS_FIELDS` to `COMPLETENESS_FIELDS`. They are now a dictionnary by object type (see example)

New features

- POI publication is now controlled like treks
- POI now have a public PDF too
- Introduced `VIEWPORT_MARGIN` setting to control list page viewport margin around spatial extent from `settings.ini` (default: 0.1 degree)

  notes After upgrading, mark all POIs as published in the languages of your choice

```
UPDATE o_t_poi SET public_fr = TRUE;
UPDATE o_t_poi SET date_publication = now();
```

Bug fixes

- Add missing credit for main picture in trek PDF (fixes #1178)
- Paths module is now removed from user interface in *Geotrek-light* mode. (i.e. with `TREKKING_TOPOLOGY_ENABLED = False`)
- Make sure text fields are cleared (fixes #1207)
- Intervention subcontracting was missing in detail pages (fixes #1201)
- Make sure TLS is disabled when `mailtls` is False in settings
- Fix list of POIs in path detail pages (fixes #1213)
- Fix highlight from map for project list page (fixes #1180)

Internal changes

- Extracted the trek publication to a generic and reusable notion
- Complete refactor of Trek JSON API, now taking advantage of Django REST framework instead of custom code
- Added read/write REST API on all entities
- Refactored URLs declaration for altimetry and publishable entities
- Change editable status of topology paths in Django forms, since it was posing problems with Django-rest-framework
- Add elevation profile SVG URL in trek detail JSON (fixes #1205)
- Simplified upgrade commands for `etc/` and `var/`, and mention advanced configuration file

12.28 0.26.3 (2014-09-15)

Bug fixes

- Fix pretty trek duration when duration is between 24 and 48H (fixes #1188)
- Invalidate projet maps captures when interventions change, and treks maps when POIs change (fixes #1181)

12.29 0.26.2 (2014-08-22)

Bug fixes

- Fix search among attached files in Adminsite (fixes #1172)

12.30 0.26.1 (2014-08-21)

Bug fixes

- Upgrade *django-mapentity* for bug fix in ODT export and list of values in detail pages

12.31 0.26.0 (2014-08-21)

New features

- Interventions in project detail page is now shown as a simple table (ref #214)
- A generic system for interaction between objects attributes and details map was developped. It works with project interactions, topologies paths, etc. (ref #214)
- Show enumeration of interventions in project PDF exports (fixes #960)
- Number of POIs in now limited to 14 items in trek export (ref #1120)
- Number of information desks in now limited to 2 items in trek export (ref #1120). See settings `TREK_EXPORT_INFORMATION_DESK_LIST_LIMIT` and `TREK_EXPORT_POI_LIST_LIMIT`
- Justify texts of POIs in trek export, now converted to plain text.
- Trek export geometries are now translucid red by default (see `MAP_STYLES` setting) (ref #1120)
- Paths apparence in trek exports are now controlled by MAP_STYLES setting too.
- Images attachments are now resized to 800x800 for publication (instead of 500x500)
- Clarify intervention cost by function and mandays (fixes #1169)

Bug fixes

- Fix paths layer not being shown in detail pages (fixes #1161)
- Fix position of point topologies when closest path is not perpendicular (fixes #1156)
- Prevent parking to be cropped on map exports (fixes #1006)

Upgrades notes

Since the map export have changed, empty the cache :

```
rm -rf var/media/maps/*
```

12.32 0.25.2 (2014-08-14)

Bug fixes

- Fix translation of Job in intervention form (fixes #1090)

- Fix form error when no geometry is provided (fixes #1082)
- Show attachments in adminsite (fixes #1162)
- Fix JSON formatting of object attachment lists in API

12.33 0.25.1 (2014-08-01)

Bug fixes

- Fix Geotrek CSS not being deployed properly
- Fix trek relationships causing errors for PDF export

12.34 0.25.0 (2014-08-01)

New features

- Added projection file EPSG:32622 (fixes #1150)
- Now log addition and suppression of attachments in history
- Added notion of points of reference for treks (fixes #1105). (Can be disabled with `TREK_POINTS_OF_REFERENCE_ENABLED = False`)
- Edit the parking location directly on the trek map (ref #387)
- Show enumeration of POIs in trek PDF exports (fixes #871)

BUG fixes

- Fix permission check to see attachments (fixes #1147, ref #1146)
- Fix grouping of interventions in detail pages (fixes #1145)
- Fix project total intervention cost (fixes #958)
- Fix history entries not being saved when using formsets (fixes #1139)
- Fix postal code being saved as integer (fixes #1138). Existing records will have a leading zero when shorter than 5 charaters.
- Fix bug when form of intervention on infrastracture is not valid
- Limit height of layer switcher on small screens (fixes #1136)
- Get rid of next parameter when redirecting to login when permission missing (fixes #1142)
- Fix apparence of main menu when permissions are missing to view logbook and admin (ref #1142)

Internal changes

- Rework display of lists in detail pages, better factorization
- Removed links in logbook list for certain models
- Display messages in login page too (useful for redirections)

Support edition of several fields on the same map, via django-leaflet new feature (fixes #53)

12.35 0.24.3 (2014-06-27)

BUG fixes

- Fix cursor not removed when terminating topology (fixes #1134)
- Fix information desk geometry hard-coded SRID

12.36 0.24.2 (2014-06-27)

BUG fixes

- Fix EPSG:32620 projection file
- Fix JS error when path layer is not on map
- Fix start and end markers not shown as snapped on path edition (fixes #1116)
- Fix groups not shown in Adminsite with external authent (fixes #1118)
- Use markers as mouse icons for topology creation, use resize cursors as fallback only (fixes #1100)
- Minor changes in trek print template (ref #1120)

12.37 0.24.1 (2014-06-26)

BUG fixes

- Fix SVG files for difficulty pictograms
- Fix group fixtures for "Rédacteurs" (fixes #1128)
- Fix tab "None" in list view (fixes #1127)
- Fix external datasources icons in Admin (fixes #1132)
- Fix information desk maps in Admin forms (fixes #1130)
- Fix topology edition when two forced passages on same path (fixes #1131)

Minor changes

- Ordered log entries by date descending (ref #1123)
- Renamed "Data sources" by "External data sources" (fixes #1125)
- Renamed "Foncier" to "Statuts" (fixes #1126)

12.38 0.24.0 (2014-06-23)

** Breaking changes **

- POI icons shall now have a solid background, since no background is added in trek detail map anymore.
- Pictograms fields were added to trek difficulty, route, network. You can use the images provided in the `trekking/fixtures/upload/` folder.

  notes Just before upgrading, delete the following folders

```
rm -rf lib/src/django-modeltranslation
```

After upgrading, mark all treks as published in the languages of your choice

```
UPDATE o_t_itineraire SET public_fr = TRUE;
UPDATE o_t_itineraire SET date_publication = now();
```

New features

- Public TREK export - hide block label if value is empty (fixes #873)
- Add POIs on trek GPX (fixes #774)
- Close list filter when click outside (fixes #916)
- Rename recurrent field to subcontracting on intervention (fixes #911)
- Rename comments field to description on intervention (fixes #927)
- Show object type in ODT export (fixes #1000)
- Show paths extremities on map (fixes #355)
- Ability to reuse topology when adding objects from detail pages (fixes #574, fixes #998)
- Command to generate all elevation charts (fixes #799)
- SITRA support in Tourism datasources (fixes #1064)
- Added status field on feedback reports (fixes #1075)
- Show restricted areas by type in layer switcher (fixes #961)
- Publication status is now controlled by language (fixes #1003). Previous behaviour can restored by setting `TREK_PUBLISHED_BY_LANG` to False.
- Added publication date on trek (ref #1003)
- Ability to see a trek in the different published languages (ref #1003)
- A trek can now have several information desks (fixes #1001)
- Information desks are now shown in trek detail map (fixes #1001)
- Information desks now have optional photo and position, as well as some additional fields (fixes #1001)
- Disabled marker cluster in trek detail map
- Remove background and halo effect on POI icons
- Added 3 new settings to control trek detail map icons size (`TREK_ICON_SIZE_POI`, `TREK_ICON_SIZE_PARKING`, `TREK_ICON_SIZE_INFORMATION_DESK`)

Minor features

- Intervention disorders is not mandatory anymore (fixes #661)
- Improved details in trek form, use Chosen for many-to-many widgets
- Documented the configuration of map layers apparence
- Show layers colors in layer switcher
- Detail page : replace “Maintenance” by “Works” (fixes #889)
- Detail page : interventions on paths are now grouped together, and a small icon is shown (fixes #735)
- Detail page : show intervention costs (ref #958, fixes #764)

- Show project intervention total costs (fixes #958)
- Allow to override the Trek public document template (see *advanced configuration* in docs)
- Close calendar after date choice in intervention form (fixes #928)
- Renamed Attachment submit button (fixes #925)
- Added a new setting `PATH_SNAPPING_DISTANCE` to control paths snapping distance in database (default: 1m)
- Allow to disable trails notion (fixes #997) (see *advanced configuration* in docs)
- Show POI name on hover instead of category in trek detail pages (fixes #1004)
- Form tabs are now always visible while scrolling (fixes #926)
- New URL to obtain the attached filelist of an object
- Remove float notation in altimetry altitude labels
- Control altimetry profiles font using `ALTIMETRIC_PROFILE_FONT` setting
- Add pictograms to routes and networks (fixes #1102)

Bug fixes

- Fixed Signage and Infrastructure year filter label (fixes #293)
- Fixed paths layers not always shown below other layers (fixes #912)
- Clarify legend and title for attachments (fixes #888)
- Fixed cannot clear trek fields in database (fixes #1095)
- Fixed missing translation of "Load local file" (fixes #1085)
- POI types are displayed as such in adminsite
- Fix duplicate authors in history list in detail pages

Internal changes

- Added pictogram on difficulty, useful for *Geotrek-mobile* (fixes #1109)
- Added experimental *Geotrek-light* support (ref #1019)

12.39 0.23.5 (2014-06-19)

Bug fixes

- Fix crash when TourInFrance has malformed website or phone
- Fix translations not being installed

12.40 0.23.4 (2014-06-18)

Bug fixes

- Fix massive upgrade bug, where new migrations were ignored. Due to migration operation introduction in 0.22 installation script.

Special thanks to Noël Martinon, Félix Merzeau, Gil Deluermoz and Camille Montchicourt for their patience on this.

12.41 0.23.3 (2014-06-18)

** Bug fixes **

- Fix static files compression when using Google Mercator projection in maps
- Fix intermediary points order in topology de/serialization, and remove useless topology serialization optimizations (fixes #1031)

12.42 0.23.2 (2014-06-13)

** Bug fixes **

- Fixed land records not shown in detail pages
- Fixed JSON DEM area extent for treks
- Fixed targets list for tourism datasources (fixes #1091)
- Cache tourism datasources for one day (setting `CACHE_TIMEOUT_TOURISM_DATASOURCES`)
- Fix crashes with TourInFrance sources
- Add link to OSM in feedback email (fixes #1089, #1093)
- Fix feedback email translation (fixes #1087)
- Fix problem with permission check "read attachment" in detail page (fixes #1092)
- Fix measure control appearing twice in forms (fixes #1078)
- Fix 404 on download buttons from list views
- Fix POI translated fields not tabbed (fixes #1065)
- Fix missing translation of "Add a new POI" (fixes #1086)
- Fix invalid snapping when save path without editing geometry (fixes #1099)
- Add missing properties in feedback report detail page.
- Hide all modules information in report detail page.
- Add missing translations of feedback module.
- Show object type in ODT export (fixes #1000)

** Internal changes **

- Upgraded to Mapentity 1.4.0
- Upgraded to Leaflet 0.7.3

** Installation **

- Fixed content types migration of land to zoning apps (Thanks Noël Martinon)
- UbuntuGIS stable maintainers have *upgraded* (sic) GDAL to 1.10.0. Upgrading GDAL is painful, and PostGIS packages may have to be reinstalled (data shouldn't be lost though). *Remember it was recommended to run PostGIS on a different server.*

  notes On June 2th 2014, the Ubuntu GIS stable repository switched from `libgdal1` to `libgdal1h`. It broke the deployment script of many projects, including *Geotrek*.

It is a good thing, since it paves the way for the last Ubuntu LTS release (14.04). However, it breaks the *Long Term Support* philosophy of the previous one (12.04), supposed to be supported until 2019.

Morality : we cannot trust the *Ubuntu GIS stable* repository anymore.

Regarding *Geotrek*, such upgrades of Ubuntu packages is not supposed to be covered by its installation script. If you face any problems, please refer to the community or commercial support (such as *Makina Corpus* for example).

12.43 0.23.1 (2014-05-22)

** Bug fixes **

- Fixed regression when editing topologies without modification
- Fixed widget for Trails to allow linear topologies only

12.44 0.23 (2014-05-22)

** Breaking changes **

Read all release notes carefully.

- Trails are now managed as topologies (fixes #370). Existing trails geometries are likely to be **LOST** (*see below*)
- Rename `mailadmin` to `mailadmins` in `etc/settings.ini`
- Permission systems has been refactored (*see below*)

** Bug fixes **

- Force browser cache revalidation of geojson data (fixes #843)
- Force browser cache revalidation for path graph (fixes #1029)
- Fix deletion porblems in AdminSite (fixes #1008)
- Trek advised parking and public transport are translatable (fixes #1024)
- Fix missing translation “no filters” and “current criterias” (fixes #884)
- Fix PDF versions of documents not being translated (fixes #1028)

** New features **

- Command to import shapefile with points into POI as topologies (fixes #952)
- Add views to serve DEM on object area as JSON (*Geotrek-Rando 3D*)
- New tourism module : external datasources can be configured from Adminsite (*GeoJSON, TourInFrance, ...*) and added to maps (by module, or published on *Geotrek-rando*...)
- Show number of attached files in tab (fixes #743)
- New permission to control download of attachments
- New permission to allow users or groups to bypass structure restrictions
- Add a setting to serve attached files as download (default: True) (fixes #976)
- Track objects creations, changes and deletions (fixes #300)
- Added a reader group (fixes #495)

- Topologies are not recreated if user did not edit field (fixes #833)
- Added static file for projection EPSG:32620
- Show land objects in menu (fixes #942)
- Documented configuration of custom projections (fixes #1037)
- Buttons in the list menu to add new objects easily
- Add fullscreen button on maps (fixes #904)
- Add all controls on detail map (fixes #907)
- Add a button to close filters (fixes #424)
- Added new sections in documention : *FAQ*, *User-manal* and *Advanced configuration*

** Internal changes **

- Enabled database connection pooling in production
- An error is raised if SRID has not unit in meters (fixes #921)
- Zoning and land modules are now splitted (fixes #954)
- Complete refactor of geographical form fields. Now uses *django-mapentity* from its own repository instead of internal orphan branch.
- Complete refactor of maps initialization, without inline preprocessed JavaScript
- Rely on Django permissions to control access to detail, list and exports (fixes #675)
- Core and altimetry modules are now splitted (fixes #996)
- Renamed treks POIs GeoJSON properties

notes

- Before upgrading, backup your trail records and geometries, using pgAdmin

```
CREATE TABLE backup_sentiers AS SELECT * FROM l_v_sentier;
CREATE TABLE backup_troncons_sentiers AS (
  SELECT l_t_troncon.id AS troncon, l_t_sentier.id, l_t_sentier.nom
  FROM l_t_troncon, l_t_sentier
  WHERE l_t_sentier.id = l_t_troncon.sentier
);
```

- Before upgrade, rename `mailadmin` to `mailadmins` and add a new line `mailmanagers` in `etc/settings.ini`. See *Email settings* section in documentation.
- Just before upgrading, delete the following folders

```
rm -rf lib/src/django-modeltranslation lib/src/mapentity
```

notes

- After upgrading, load the default permissions of the previous groups, otherwise users won't have access to their modules

```
bin/django loaddata geotrek/authent/fixtures/minimal.json
bin/django loaddata geotrek/authent/fixtures/basic.json
```

- After upgrading, make sure *Active* is checked for the user *__internal__* otherwise screenshotting won't work.

- After upgrading, load basic data for the new module

```
bin/django loaddata geotrek/feedback/fixtures/basic.json
```

- After upgrading, make sure the user specified in *Geotrek-rando* is in the group *Geotrek-rando*, or has at least the following permissions in the AdminSite :
  - `paperclip | attachment | Can read attachments`
  - `trekking | Trek | Can read Trek`
  - `trekking | Trek | Can export Trek`
  - `trekking | POI | Can read POI`
  - `trekking | POI | Can export POI`
  - `feedback | Report | Can add report`
- After upgrading, compare visually the resulting migrated trails using QGis, by opening both layers `l_v_sentier` and `backup_sentiers`.

12.45 0.22.6 (2014-04-27)

- Remove hard-coded mentions of EPSG:2154 in database initial migrations (fixes #1020)
- Fix version download and unzip in installation script.

Thanks Noël Martinon, from Guadeloupe National Park, for reporting both issues.

12.46 0.22.5 (2014-03-19)

- Fix compilation of translations (ref #970)
- Fix distinction between languages and translated languages (fixes #968)
- Fix history tabs not being shown after upgrade to Django 1.6 (fixes #975)
- Fix regression on land layer label colors (fixes #980)
- Fix attached files not shown after file upload/delete (fixes #933)
- Fix links being removed from trek descriptions (fixes #981)
- Fix missing thumbnail in trek and POI detail pages
- Fix black background on map captures (fixes #979)
- Increased scale text size on map captures (fixes #850)
- Show map attributions on map captures (fixes #852)
- Fix aspect ratios of map in trek public documents (fixes #849)
- Fix objects list not being filtered on map extent (fixes #982)
- Fix coherence of map layer when text search in objects list (fixes #702)
- Fix number of results not refresh on text search (fixes #865)
- Added north arrow in map image exports (fixes #851)

- Removed darker effect on backgrounds for map image exports, and added internal advanced setting `MAPENTITY_CONFIG['MAP_BACKGROUND_FOGGED'] = True`

12.47 0.22.4 (2014-03-06)

- Fix install.sh not compiling locale messages (fixes #965)
- Moved trek completeness fields to setting *TREK_COMPLETENESS_FIELDS*. Duration and difficulty were added, arrival was removed (fixes #967)
- Fix regression about source locale messages (fixes #970)
- Fix regression link *Back to application* lost from adminsite (fixes #971)
- Serve uploaded files as attachments (fixes #972)
- Remove help texts being shown from filter forms (fixes #966)
- Fix form pills for translated languages (fixes #968)

12.48 0.22.3 (2014-02-17)

- Fix install.sh help not being shown
- Fix screenshots being empty if deployed behind reverse proxy with rool url (fixes #687)
- Fix GPX file layer circle marker size (fixes #930)
- Remove JS libraries from login page
- Fix install.log being removed during installation
- Fix execution characters being shown during DB backup prompt
- Fix PhantomJS and CasperJS installation and deployment
- Added more automatic frontend tests
- Default allowed hosts is now *

12.49 0.22.2 (2014-02-14)

- Fix secured media URLs when using a non empty *rooturl* setting
- Fix proxy errors by disabling keep-alive (fixes #906)

12.50 0.22.1 (2014-02-13)

- Prevent install script to delete existing media files from disk in some situations.

12.51 0.22 (2014-02-12)

Before upgrade

- Backup your database.
- If you upgrade in the same application folder, first delete the *geotrek* sub-folder.
- Use *install.sh* to upgrade (*make deploy* won't be enough)
- After upgrade, make sure the following query returns only ~23 results:

  SELECT COUNT(*) FROM south_migrationhistory;

BREAKING changes

- For upgrades, Geotrek 0.21 is required.
- Uploaded files are now restricted to authenticated users (fixes #729)

  notes *Geotrek-rando* 1.23 or higher is required to synchronize content.

NEW features

- In list view, click on map brings to detail page, mouse over highlights in list.
- Show path icon if intervention is not on infrastructure (fixes #909)
- Add spanish translation
- Add photographie into default attachments filetype
- Map location combobox (Cities, Districts, Areas) are not shown if empty or disabled.
- Several database views have been created (fixes #934)
- Remove dots from path icon (fixes #939)
- Intervention, infrastructure and project filters list of years is now dynamic (fixes #948)
- Application available languages (*english*, *french*, *italian*, *spanish*) are now distinct from translated content languages (*languages* value in `settings.ini`)

Minor changes

- Improved apparence of map controls
- Improved apparence of path intermediary points
- Improved apparence of form validation buttons
- Add auto-generated docs at /admin/doc/
- Nicer installation script output

Installation script

- Scan and ortho attributions can now be set using *scan_attributions* and
- Propose to backup DB before Geotrek upgrade (fixes #804)
- Settings edition prompt only happens at first install *ortho_attributions* in *settings.ini*.

BUG fixes

- Fix convert urls behind reverse proxy with prefix
- Fix deployment problem if `layercolor_others` not overidden in settings.ini
- Fix topology kinds to be 'INTERVENTION' for intervention without signage/infrastructure

- Fix restricted areas types display in admin (fixes #943)
- Fix list ordering of trek relationships and web links (fixes #929)
- Fix nginx log files being already empty after logrotate (fixes #932)
- Fix project add button when no permission

  notes List of restricted areas is not shown on map by default anymore. Restore previous behaviour with advanced setting *LAND_BBOX_AREAS_ENABLED* as True.

Internal changes

- Upgrade to Django 1.6 (fixes #938)
- Upgrade to Leaflet 0.7
- Upgrade a great number to python and JavaScript libraries
- An internal user (with login permission) is used to authenticate the Conversion and Capture services.
- Installation script is modular (standalone, geotrek only, ...)
- Developement server now listens on all interfaces by default
- Database migrations were resetted, no postgres *FATAL ERROR* message will be emitted on fresh install anymore (fixes #937). See *Troubleshooting* in documentation.

12.52 0.21.2 (2014-02-04)

BUG fixes

- Warn on tiling landscape/portrait spatial extent only if map with local projection
- Safety check on thumbnailing if images are missing from disk (*useful for troubleshooting, when importing existing dumps*).
- Fix overlapping filter if no records present (fixes #931)

12.53 0.21.1 (2013-12-11)

Improvements

- Smooth DEM drapping, improving altimetric information and profiles (fixes #840, ref #776)

BUG fixes

- Signage forms are now restricted by structure (fixes #917)
- Fix geometries computation when path split occurs on return topology (fixes #899)
- Add title on links in list views (fixes #913)
- Prevent horizontal scroll on forms, caused by textareas (fixes #914)
- Fix empty 3d geometry of point topologies with offset (fixes #918)

  notes In order to recompute all paths topologies altimetry information, you can perform the following queries:

  ```
  UPDATE l_t_troncon SET geom = geom; UPDATE e_t_evenement SET
  decallage = decallage;
  ```

Reading information from rasters is costly. Be prepared to wait for a while.

12.54 0.21 (2013-11-28)

Improvements

- Increase height of multiple select (fixes #891)
- Add project field in intervention filter (fixes #896)
- Many minor improvements for infrastructures in adminsite (fixes #886)
- Add category in intervention filter (fixes #887)

BUG fixes

- Fix KML coordinates not being in 3D.
- GPX now has trek description (fixes #775)
- Order overlapping topologies by order of progression (fixes #777)
- Improved TinyMCE configuration, for resize and cleanup (fixes #351, #711)
- Changed trek duration interval for notion of days (fixes #880)
- Show city departure in trek public export (fixes #881)
- Document customization of TinyMCE config (fixes #882)
- Fix 404 error on path delete (fixes #900)
- Fix project constraints not being displayed in details (fixes #893)
- Fix organism translation in project form (fixes #892)
- Fix apparence of forms on small screen (fixes #744, #902)
- Fix modify button being hidden to editors (fixes #901)
- Fix overlap between map controls and label (fixes #883)
- Fix translation of district in list filters (fixes #890)
- Fix integrity error on land intersection on path update (fixes #897)
- Fix form layout problems (fixes #712, #879)

12.55 0.20.9 (2013-10-30)

- Fix altimetric profile if topology geometry is wrong (fixes #875)
- Fix apparence of creation button in intervention list (fixes #877)
- Fix topology geometries that were sampled like paths 3D geometry (fixes #878)
- Fix topology lines geometries join in some situations (ref #722)
- Fix topology not well displayed if start/end on intersection (fixes #874)

12.56 0.20.8 (2013-10-22)

- Public trek export : Fix various layout regressions (ref #848)
- Public trek export : Show POI theme pictogram (fixes #858)
- Public trek export : full width for information desk frame (fixes #856)
- Public trek export : add footer with trek title and page numbers (fixes #861)
- Public trek export : add floating picture in POI detail (fixes #860)
- Public trek export : fix POI thumbnails missing (fixes #869)
- Fix point offset lost on path update (fixes #867)
- Fix reconnect point topologies with offset to closest path (fixes #868)

12.57 0.20.7 (2013-10-16)

- Fix topology geometry 3D being draped twice (fixes #863)
- Altimetric profile : Show max distance and round values (fixes #853)
- Altimetric profile : Add settings for colors (fixes #854)
- Public trek export : POIs list in two columns (fixes #855)
- Public trek export : POIs details without column break (fixes #857)
- Public trek export : Show pictures attributions (fixes #859)
- Public trek export : Use 10pt fonts in every text blocks (fixes #848)

  notes # Empty profiles cache rm -rf var/media/profiles/*

12.58 0.20.6 (2013-10-14)

- Remove 3D from JS WKT serializer
- Safety check if path is less than 1m
- Remove mentions of 2154 projection in schema migrations
- Fix performance issues in altimetric JSON (fixes #845)
- Fix filter forms missing from Trek and POI lists (fixes #847)
- Fix empty Nginx log files (fixes #846)

12.59 0.20.5 (2013-10-09)

- Fix migration of draping utility function

12.60 0.20.4 (2013-10-09)

- Fix sort stake by id (level) (fixes #835)
- Rename stake to maintenance stake (fixes #834)
- Add validity to path filter (fixes #836)
- Do not redrape topology geometries, use path 3D geometry (fixes #832)
- Fix document export of Trail objects (fixes #839)
- Fix trail helpers for land layers (fixes #838, ref #842)
- Fix install on fresh folder, missing folder `lib/src` (fixes #844)

12.61 0.20.3 (2013-09-30)

BUG fixes

- Fix typo in french translation of Properties (fixes #815)
- Fix missing description from infrastructure/signage detail page (fixes #816)
- Fix Cities / Districts / Restricted Areas in project detail page (fixes #817)
- Fix only deleted topology can have geom = NULL (fixes #818)
- Fix geometries not editable in QGis by switching path and topologies geometries to 2D (fixes #688)
- Fix altimetric sampling precision setting not taken in account in SQL (ref #776)

12.62 0.20.2 (2013-08-27)

- Fix convert urls behind reverse proxy with prefix
- Fix Trek public print conversion
- Fix display of trek length in public document (one decimal only)
- Fix altimetric graph delaying map display in detail pages

  notes # Empty maps captures cache rm -rf var/media/maps/trek-*

12.63 0.20.1 (2013-08-26)

- Add DB index for start and end columns
- Merge gunicorn logs with respective applications logs
- Lower logging level in production (WARNING -> INFO)

BUG fixes

- Fix deployment error with application's TITLE
- Fix deployment errors with mandatory external authent values
- Fix trek export layout: fit map image and altimetric profile in one page.

12.64 0.20 (2013-08-23)

- Edit difficulty id in Admin site, mainly used to order difficulty levels (fixes #771)
- Use explicit list of fields in forms, instead of excluding model fields (fixes #736). Issue #712 was closed too, since most suspected cause was field listings. Please re-open if problem re-appears.
- Fix timeout on POI Shapefile and CSV exports (fixes #672)
- Altimetric profiles are now computed in PostGIS (fixes #778, #779)
- Positive and negative ascents are now computed using more DEM resolution (fixes #776)

  notes Setting `PROFILE_MAXSIZE` was replaced by `ALTIMETRIC_PROFILE_PRECISION` which controls sampling precision in meters (default: 20 meters)
- Altimetric profiles were removed from object map images
- Altimetric profiles are now plotted using SVG
- Altimetric profiles are now inserted into path documents and trek public printouts (ref #626)
- Fix deletion of associated interventions when editing infrastructures (fixes #783)
- Latest record is updated (*touch*) when a DELETE is performed on table (refreshs cache) (fixes #698)
- Reworked settings mechanism to follow Django best practices

  notes Replace all computed values from `etc/settings.ini`. For example, replace "60 * 60" by 3600. (You can increase this value to several hours by the way)
- Allow server host to capture pages (fixes #733)
- Adjust map capture according to geometry aspect ratio (fixes #627)
- Always show path layer in detail pages (fixes #781)
- Fix restore of topology on loop paths (fixes #760)
- Fix topology construction when loop is formed by two convergent paths (fixes #768)
- Added small tool page at `/tools/extents/` to visualize configured extents (ref #732)
- Removed setting `spatial_extent_wgs84`, now computed automatically from `spatial_extent`, with a padding of 10%.

  notes Have a look at `conf/settings.ini.sample` to clean-up unnecessary values from your settings file.
- Fix paths offset for portrait spatial extent (fixes #732)
- Rely on Tilecache default max resolution formulae (fixes #732)
- Due to bug in Leaflet/Proj4Leaflet (https://github.com/kartena/Proj4Leaflet/issues/37) landscape spatial extents are not supported. Please adjust spatial_extent to be a portrait or square, or application will raise *ImproperlyConfiguredError*.
- Reload map objects on zoom out too (fixes #435)
- Fix computation of *min_elevation* for point topologies (fixes #808)

  notes In order to recompute all paths topologies altimetry information, you can perform the following query: `UPDATE e_t_evenement SET decallage = decallage;`. Reading information from rasters is costly. Be prepared to wait for a while.

12.65 0.19.1 (2013-07-15)

- Restore `pk` property in Trek GeoJSON layer

12.66 0.19 (2013-07-12)

- Intervention length field (readonly if geometry is line)
- Fix apparence bug if no rights to add treks and pois (fixes #713)
- Fix extremities snapping (fixes #718)
- Show information desk in trek detail page (fixes #719)
- Fix topology adjustments after path split (fixes #720)
- On edition show global line orientation instead of individual paths (fixes #679)
- Fix invalid topology if trek goes twice on same path (fixes #671)
- Overlapping is now more precise (fixes #710)
- Reworked trek print layout
- Fix topology building if paths are taken twice (fixes #722)
- Fix tiling offset with horizontal bboxes
- Fix display of POI layer by default on list (fixes #696)
- Fix translation of not validated paths (fixes #730)
- Fix error if topology is required and empty (fixes #745)
- Fix duplication of N-N relations on path split (fixes #738)
- Fix project map in detail page (fixes #734)
- Fix project listed deleted interventions (fixes #739)
- Fix project listed infrastructures through interventions (fixes #740)
- Fix saving intervention form on infrastructure
- Repair serializing of properties after upgrade of django-geojson (fixes #755)
- Added `public_transport` and `advised_parking` to trek JSON detail API (fixes #758)
- Repair land layers colors after upgrade of django-geojson
- Upgraded to django-geojson 2.0
- Upgraded to Django 1.5

  notes Specify allowed host (server IP) in `etc/settings.ini` (*for example*): `* host = 45.56.78.90` Empty object caches: `* sudo /etc/init.d/memcached restart` `* rm -rf ./var/cache/*`

12.67 0.18 (2013-06-06)

- Add pretty trek duration in JSON

- Add information desk field in Trek (fixes #624)

12.68 0.17 (2013-05-17)

- Show trek duration as human readable in minutes, hours and days (fixes #471, #683)
- Fix hover on paths that interfered with clic for topology creation (fixes #680)
- Run API urls on different workers (ref #672)
- Fix redirect to root url after logout (fixes #264)
- Fix redirect to next after login (fixes #381)
- Switch to Memcached instead of local memory in production
- Move secret key to settings.ini
- Relate paperclip FileType to Structure (fixes #256)
- Relate PhysicalTypes to Structure (fixes #255)
- Relate Organisms to Structure (fixes #263)
- Compute max_resolution automatically
- Fix creation and edition of interventions on infrastructures (fixes #678)
- Change default objects color to yellow
- Restored Italian translations
- Fix regex for RAISE NOTICE (fixes #673)
- Initial public version

See project history in *docs/history.rst* (French).

CHAPTER 13

Indices and tables

- genindex
- modindex
- search